



City of Phoenix  
Office of the City Engineer  
Design and Construction Procurement  
200 W. Washington Street, 5<sup>th</sup> Floor  
Phoenix, Arizona 85003-1611

**INDIAN SCHOOL FIBER TRANSPORTATION ENHANCEMENT PROJECT  
FED AID NO. PHX-0(362)D - ADOT TRACS NO.T023801C  
DESIGN-BID-BUILD  
PROJECT NO. ST89360035-1**

**RFX6000001054**

**ADDENDUM NO. 1**

ISSUE DATE: February 18, 2021

Bidders are hereby notified that the Bidding and Contract Documents for the above project, for which Bids are to be received on **Tuesday, February 23, 2021**, are amended as follows:

**QUESTIONS AND ANSWERS**

Q1.	Will the City be open to utilizing a 12 CT fiber with a poli-mod in lieu of the fiber breakaway connector as it will save on time and money for the project?
A1.	<b>The fiber breakaway connector system has been included in an approved PIF and is preferred by the City. No replacements will be acceptable.</b>
Q2.	In reference to traffic control Item 7010001. The special provisions Page SP-17 paragraph 701-4.02 A addresses an account to reimburse traffic control work using the predetermined rates. This sound like a force account to me. Is the City going to establish a budget for the 7010001 account? If not, is contractor required to use the predetermined rates to estimate the cost of maintenance and protection of traffic? If the unit billing exceeds the estimate will the contractor be compensated for the overrun?
A2.	<b>On page P-2 of the BID PROPOSAL, all bids should include \$242,000.00 for ITEM 7010001 as a lump sum item. See attached Bid Proposal Page P-2. Predetermined rates should be used, and the Contractor is responsible to manage this lump sum item (not to exceed) during the construction of the project so as to meet the requirements in the special provisions for compensation.</b>
Q3.	How is the contract paid for doing the required inventory of existing pull boxes and conduits?
A3.	<b>The work for completing the inventory is included in ITEM 7370455 and the work for reconditioning any existing inventory found not to be satisfactory are included in ITEM 9240011. On page P-2 of the BID PROPOSAL, all bids should include \$25,000 for ITEM 9240011 as a force account item. See attached Bid Proposal Page P-2. See Special Provisions language below:</b>  <b>ITEM 7370455 MISCELLANEOUS ELECTRICAL (AS-BUILT DRAWINGS):</b> <b>Method of Measurement:</b> Record drawings will be measured as a single, lump sum unit of work. <b>Basis of Payment:</b> The accepted quantities of record drawings, measured as provided above, will be paid

	<p>for at the contract lump sum price, which price shall be full compensation for the work, including all related work required for an approved set of record drawings.</p> <p><b>ITEM 9240011 FORCE ACCOUNT WORK (PULL BOX AND CONDUIT RECONDITIONING):</b>  <b>Method of Measurement:</b>  <b>FORCE ACCOUNT WORK (Pull Box and Conduit Reconditioning) will be measured as separate units of work under ITEM 9240011.</b>  <b>Basis of Payment:</b>  <b>The accepted quantities of FORCE ACCOUNT WORK (Pull Box and Conduit reconditioning), measured as provided above, will be paid at the contract unit price and in accordance with Section 109.04 (D) Force Account of the Standard Specifications.</b></p>
Q4.	There are some locations that call out for 12 SMFO without a breakaway connector. How are the 12 SMFO being paid for at these locations?
A4.	<b>See item 2 of SECTION II – SUBMITTALS edit below.</b>
Q5.	Item 13, the bid schedule calls out for a quantity of 1 each. However, on page S.P.-39 it states that one switch is to be install in two different locations should the quantity be 2 each or will the item just over run?
A5.	<b>See item 2 of SECTION I – INFORMATIVE edits below.</b>
Q6.	I did not see a detail in the plans as to how the new conduits will be routed at locations where there is new (4) 1.25" conduits entering the existing controller cabinets. Can more detail on this be provided for these locations?
A6.	<b>No new conduits will be connecting to existing controller cabinets. New conduits will be routed into replaced home run pull boxes as shown on No. 7E Pull Box Installation Details. Connections into the controller cabinets will utilize existing conduit as shown on Cabinet Installation Detail.</b>
Q7.	Construction Note 1, 14 and 31 state to install per details, however, there are several conduit installation details to choose from. Is the contractor supposed to determine the installation method (trenching or boring) they see best fit for each area?
A7.	<b>Yes, the Contractor is to determine the installation method (trenching or boring) they see best fit for each area to meet the project quantity assumptions.</b>
Q8.	For Construction Note 26 are we to assume that all existing No. 9's will need 5" J-Hooks? This can't be determined until the inventory has been completed and is typically work that is covered under force account or time & materials basis. Please advise.
A8.	<b>Include installation of J-Hooks as required by inventory findings in force account ITEM 9240011. See item 3 of SECTION I – INFORMATIVE edits below.</b>
Q9.	With all of the potholing in the asphalt that will need to happen, will the contractor be required to microseal the pavement? If so, can this be added as a separate line item or as an allowance?
A9.	<p><b>Per Street Pavement Cut Policy, Arterials and Collectors require microseal for potholing.</b></p> <p><b>POTHOLING.</b> Standard potholing (more than one pothole per project) that requires backfill and compaction will be required to adhere to the above-mentioned asphalt resurfacing treatments. Permit fee and bond will be calculated using the cut area. Keyhole coring and pinhole potholing (cathodic protection) will be an exception for required pavement treatments provided the diameter of the pavement cores are less than two feet.</p> <p><b>POTHOLES</b></p>

	ONE PER PROJECT, 2 FT. X 2 FT. MORE THAN ONE POTHOLE ABOVE DESCRIPTION IS APPLICABLE.  <b>See item 4 of SECTION I – INFORMATIVE edits below with regard to estimation.</b>
Q10.	Provide the technical requirements and quantities for Small Form-Factor Pluggable (SFP) transceivers that are required for bid item 7370424 layer 3 switch. The listed switch has 16 SFP slots for 100mb/ 1 gigabit SFP and 4 SFP slots for 1 gigabit / 10 gigabit SFP.
A10.	<b>See item 5 of SECTION I – INFORMATIVE edits below.</b>

**SECTION II – SUBMITTALS**

BID PROPOSAL

1. Delete Bid Proposal Page P-2 and replace with the attached Bid Proposal Page P-2 Addendum 1
2. The quantity for the 12 SMFO CABLE between the City of Glendale No. 9 pull box and the City of Phoenix No. 9 pull box at Camelback Road on Sheet 28 will be included in BID ITEM M1042007 – ALLOWANCES FOR EXTRA WORK.

**SECTION I – INFORMATIVE**

1. Delete and Replace:

All references to “ITEM 7010006” as noted on page S.P.-19 and page S.P.-23 shall be replaced with “ITEM 7010001”.

2. Delete and Replace:

Scope of Work on Page C.F.B. 1:

Delete: “The Work includes the installation of fiber and pull box infrastructure, a Layer 3 network switch at **two locations**, and connection to City of Phoenix and neighboring agency existing fiber communications cable.”

Replace with: “The Work includes the installation of fiber and pull box infrastructure, a Layer 3 network switch at **one location**, and connection to City of Phoenix and neighboring agency existing fiber communications cable.”

104 Scope of Work To Be Done on Page S.C.-4:

Delete: “The Work includes the installation of fiber and pull box infrastructure, a Layer 3 network switch at **two locations**, and connection to City of Phoenix and neighboring agency existing fiber communications cable.”

Replace with: “The Work includes the installation of fiber and pull box infrastructure, a Layer 3 network switch at **one location**, and connection to City of Phoenix and neighboring agency existing fiber communications cable.”

ITEM 7370422 on Page S.C.-4:

Delete: “The work under this item includes furnishing and installing an environmentally hardened Layer 3 Ethernet network page S.P.-39 switch **at Fire Station #54 at Camelback Road and 23rd Avenue and also at Fire Station #61 at Indian School Road and 19th Street.**”

Replace with: "The work under this item includes furnishing and installing an environmentally hardened Layer 3 Ethernet network page S.P.-39 switch at Fire Station #54 at 99<sup>th</sup> Avenue and Campbell Avenue."

3. Special Provisions:

Under ITEM 9240011 FORCE ACCOUNT WORK (PULL BOX AND CONDUIT RECONDITIONING): include the following language on page S.P.-47 at the end of Construction Requirements: (A) Pull Box Reconditioning:

"Eight 5" hooks that mount in the 18-hole racks shall be supplied under this item (if none are present)."

4. Special Provisions:

732-5.03 Conduit: of the Standard Specifications is modified to add:

On page S.P.-25 add the bolded/italicized text below where potholing is referenced:

"No additional payment will be made for hand digging, ***potholing*** and concrete encasement."

SECTION 732 ELECTRICAL UNDERGROUND MATERIAL: of the Standard Specifications is modified to add:

On page S.P.-27 add the bolded/italicized text below where potholing is referenced:

"Locating existing conduit, ***potholing to locate existing utilities***, couplings, expansion fittings, core drilling, conduit cleaning, mandrelling, grouting, spall repair, and pavement patching or any aggregate base slurry or microseal specified to meet project or utility company requirements will not be measured."

5. Special Provisions:

Under ITEM 7370422 ELECTRICAL SYSTEM (LAYER 3 NETWORK SWITCH): add the following language on page S.P.-39 at the end of Materials:

"FOR 16-1G BASE SFP PORTS – EtherWAN SFP (Model EX-1250TSP-MB5L-A S, Duplex LC), or approved equal:

- Operating Temperature: -40 to 85°C (-40 to 185°F)
- Connector Type: Duplex LC
- Distance: 20Km
  - Transmitter (Tx) Optical Output Power: -9 to -3dBm
  - Receiver Sensitivity: -24dBm
- Cable type: 9/125 µm, Single Mode
- Wavelength: 1310nm
- Regulatory Compliance:
  - Compliant with Multi-Sourcing Agreement (MSA) Small Form Factor Pluggable (SFP)
  - Eye Safety: Compliant with Class 1 laser safety requirements EN 60825-1
  - Environmental: RoHS compliant, lead-free
  - EMC: FCC part 15, CENELEC EN 55022

- Power Supply Voltage: Single +3.3V

FOR 4-10G BASE SFP PORTS – EtherWAN SFP (Model SFPTIS40M, Duplex LC), or approved equal:

- Operating Temperature: -40 to 85°C (-40 to 185°F)
- Connector Type: Duplex LC
- Distance: 40Km
  - Transmitter (Tx) Optical Output Power: 0.5 to +5dBm
  - Receiver Sensitivity: -15.5dBm
- Cable type: 9/125 μm, Single Mode
- Wavelength: 1310nm
- Regulatory Compliance:
  - Compliant with Multi-Sourcing Agreement (MSA) Small Form Factor Pluggable (SFP)
  - Eye Safety: Compliant with Class 1 laser safety requirements EN 60825-1
  - Environmental: RoHS compliant, lead-free
  - EMC: FCC part 15, CENELEC EN 55022
- Power Supply Voltage: Single +3.3V”

6. Special Provisions:

7370452 MISCELLANEOUS ELECTRICAL on page S.P.-47 – delete in its entirety.

7. Special Provisions:

Delete and replace Special Provisions Page S.P.-13 – add title as “ADOT SPECIAL PROVISIONS” in advance of line that reads “(701DETRM, 9/29/11)”. See revised S.P.-13.

**NOTE: Bidders must acknowledge receipt of this Addendum by listing the number and date, where provided, on the PROPOSAL P.-1**

**END OF ADDENDUM**



Expires 12/31/21

Attachments:

Bid Proposal P-2 Revised (1 page)

Special Provisions – page S.P.-13 (1 page)

CITY OF PHOENIX  
BID PROPOSAL

**Project No. ST89360035**  
**Indian School Fiber Transportation Enhancement Project**  
**Fed Aid No. PHX-0(362)D - ADOT TRACS No.T023801C**

Item No.	Ref No.	Description	Unit	Quantity	Unit Price	Total
1	7010001	MAINTENANCE AND PROTECTION OF TRAFFIC	L.SUM	1	\$242,000.00	\$242,000.00
2	7320292	ELECTRICAL CONDUIT (2 - 1.25") (PVC OPEN TRENCH)	L.FT.	9,860	\$	\$
3	7320293	ELECTRICAL CONDUIT QUADDUCT (4 - 1.25") (PVC OPEN TRENCH)	L.FT.	1,275	\$	\$
4	7320296	ELECTRICAL CONDUIT (2 - 1.25") (HDPE DIRECTIONAL DRILL)	L.FT.	42,865	\$	\$
5	7320297	ELECTRICAL CONDUIT QUADDUCT (4 - 1.25") (HDPE DIRECTIONAL DRILL)	L.FT.	3,930	\$	\$
6	7320150	ELECTRICAL CONDUIT (3") (RIGID METAL)	L.FT.	140	\$	\$
7	7320421	PULL BOX (NO. 7) (WITH EXTENSION) (CITY OF PHOENIX)	EACH	40	\$	\$
8	7320451	PULL BOX (NO. 7) (WITH EXTENSION) (CITY OF GLENDALE)	EACH	2	\$	\$
9	7320460	PULL BOX (NO. 9) (CITY OF PHOENIX)	EACH	32	\$	\$
10	7320461	PULL BOX (NO. 9) (CITY OF GLENDALE)	EACH	3	\$	\$
11	7320470	BRIDGE JUNCTION BOX (CAST METAL)	EACH	2	\$	\$
12	7370652	FIBER OPTIC EQUIPMENT (TERMINATION PANEL)	EACH	1	\$	\$
13	7370424	ELECTRICAL SYSTEM (LAYER 3 NETWORK SWITCH)	EACH	1	\$	\$
14	7370424	FIBER OPTIC EQUIPMENT (FIELD HARDENED ETHERNET SWITCH)	EACH	25	\$	\$
15	7320788	SINGLE MODE FIBER OPTIC CABLE (144 FIBERS)	L.FT.	74,540	\$	\$
16	7320794	FIBER OPTIC SPLICE CLOSURE (CITY OF PHOENIX)	EACH	26	\$	\$
17	7320654	FIBER OPTIC EQUIPMENT (BREAK-AWAY CONNECTOR SYSTEM)	EACH	26	\$	\$
18	7370455	MISCELLANEOUS ELECTRICAL (AS-BUILT DRAWINGS)	L.SUM	1	\$	\$
19	9240011	FORCE ACCOUNT WORK (PULL BOX AND CONDUIT RECONDITIONING)	L.SUM	1	\$25,000.00	\$25,000.00
20	9240112	MISCELLANEOUS WORK (MODIFY EXISTING SPLICE CLOSURE)	EACH	1	\$	\$
21	M1058000	CONSTRUCTION SURVEY AND LAYOUT	L.SUM	1	\$	\$
22	E6992000	ALLOWANCE FOR STORMWATER POLLUTION PREVENTION BEST MANAGEMENT PRACTICE "BMP'S"	JOB	1	\$15,000.00	\$15,000.00
23	M4013000	ALLOWANCE FOR UNIFORMED, OFF-DUTY LAW ENFORCEMENT OFFICER	JOB	1	\$40,000.00	\$40,000.00
24	M1042007	ALLOWANCES FOR EXTRA WORK	JOB	1	\$250,000.00	\$250,000.00
<b>Base Bid (Items 1 thru 24)</b>						

/100 Dollars

**TOTAL BASE BID WRITTEN IN WORDS**

shall be video tape. The video tape shall not be made from a moving vehicle. One copy of the video tape shall be furnished to the City prior to the start of construction. The cost of the video taping shall be considered incidental to the cost of the project. No separate measurement or payment shall be made for this item.

#### **402.2 CONTRACTOR COMMUNICATION INFORMATION**

The Contractor shall provide a pager and mobile phone to his on-site Project Superintendent to ensure that the Engineer can reach the Contractor's Superintendent. This pager and mobile phone must be accessible by local land-line telephone service. The Superintendent's pager and mobile phone shall remain in service for the duration of the project, and these phone numbers shall be included on the Contractor's list of emergency phone numbers submitted at the pre-construction conference.

### **ADOT SPECIAL PROVISIONS**

(701DETRM, 9/29/11)

#### **6. SECTION 701 MAINTENANCE AND PROTECTION OF TRAFFIC: Modify and revise ADOT Standard Specification 701 as follows:**

**701-3.07 Truck-Mounted Attenuator:** the title and text of the Standard Specifications are revised to read:

**701-3.07 Truck-Mounted and Trailer-Mounted Attenuators:**

The Contractor shall provide trucks and truck-mounted attenuators, or trailer-mounted attenuators and host vehicles, at the locations shown on the project plans and/or as directed by the Engineer. The Contractor shall refer to the Phoenix Barricade Manual to determine appropriate elements of work.

Truck-mounted or trailer-mounted attenuators shall meet either NCHRP Report 350, Test Level 3 criteria, or MASH (Manual for Assessing Safety Hardware), Test Level 3 criteria, passing both mandatory and optional tests. The truck and attenuator combination shall only be used in the configuration tested. Either the truck or attenuator shall have a sequential arrow display panel or changeable message board.

Attenuators that require chocking or blocking of the vehicle to meet NCHRP Report 350 or MASH certification shall not be used.

Attenuators shall have rear-mounted, retroreflective chevron stripes and a standard trailer lighting system, including brake lights, turn signals, ICC-bar lights, and two yellow rotating beacons, strobe lights, or LED lights mounted on opposite rear corners of the truck or attenuator approximately 4-1/2 feet above the bottom of the tires. A Type C arrow panel or changeable message board shall be provided and shall be installed in accordance with the NCHRP 350/ MASH Crashworthiness Certification or FHWA Letter of Acceptance. There shall be a minimum of seven feet from the roadway to the bottom of the panel or board. Frame work shall be an integral part of the truck and be permanently mounted in such a way as to prevent the unit from separating from the truck in the case of a collision.

For each proposed truck-mounted or trailer-mounted attenuator, the Contractor shall provide a Certificate of Compliance, in accordance with Subsection 106.05, to the Engineer for approval prior to use. For truck-mounted attenuators, the certificate shall also include the certified weigh bill for the truck, and for trailer-mounted attenuators the certificate shall state the minimum weight for the host vehicle. The certificate shall state that the attenuator meets the specified criteria, and shall clearly state the roll-ahead distance. When trucks require ballasting to comply with NCHRP 350/MASH Crashworthiness Certifications, the contractor shall provide a letter from the owner supplying the attenuator and truck stating that the ballast is in compliance with the manufacturer's recommendations and that it is anchored to the truck frame. The letter shall be on the supplier's official company letterhead and shall include: